



सी.एस.आई.आर. - राष्ट्रीय भौतिक प्रयोगशाला  
**CSIR-NATIONAL PHYSICAL LABORATORY**  
(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)  
(Council of Scientific & Industrial Research)  
डा. के.एस. कृष्णन् मार्ग, नई दिल्ली - 110012  
Dr. K.S. Krishnan Marg, New Delhi - 110012  
Advertisement No. 06 /2013



**“FLOATING (WALK-IN) INTERVIEW ON 30<sup>th</sup> & 31<sup>st</sup> July, 2013”**

NPL, New Delhi (a constituent laboratory of CSIR) desires to have qualified incumbents for purely temporary and contractual positions of “Research Associate, Senior Research Fellow, Junior Research Fellow, Senior Project Fellow, Project Fellow, Project Associate and Project Assistant” under the various ongoing externally funded & time targeted sponsored projects as under:-

**30/07/2013 – Area: Physics**

Post code	Name & No. of positions	Essential Educational Qualification	Desirable	Job description	Project /Scheme Title	Tenure of project & Emoluments/ stipend (Fixed) per month	Age as on 30/07/2013 (Upper age limit as per rule with relaxation as per rule for SC/ST/OBC/Women Candidates)
1.1	Research Associate One (01)	Ph.D. (Physics) involving superconducting & magnetic materials & low temperature experimentation	Experience in studies of thin films of magnetic and superconducting materials	Preparation, characterization & low temperature experiments of thin films of magnetic & superconducting materials	Studies of electron correlations at low temperatures and high magnetic fields in tailored interfaces and heterostructures	Rs.24,000/- + 30% HRA (upto 04/12/2017)	35 Years
1.2	Junior Research Fellow One (01)	MSc. (Physics) with first division and NET (CSIR/UGC/Lectureship) qualified	Experimental Physics	Preparation & characterization of thin films of magnetic & superconducting materials	Studies of electron correlations at low temperatures and high magnetic fields in tailored interfaces and heterostructures	Rs. 16,000/- + 30% HRA (upto 04/12/2017)	28 Years
2.0	Project Assistant Level II One (01)	MSc. Physics with first division	-	Preparation and characterization of nanoparticles & thin films of magnetic and superconducting materials	Standardization for Nanoscience and Technology	Rs. 8,000/- (consolidated) (upto 04/10/2014)	28 years
3.0	Project Fellow One (01)	M.Tech (Nanotechnology or Material Science) with at least 60% marks	Experience of working on magnetic materials	Synthesis, microstructural characterization and magnetic property evaluation of magnetic materials	D-NEED – “Development of RE-free Permanent Magnet Materials”	Rs. 16,000/- + 30% HRA (upto 31.03.2017)	28 years

<b>4.0</b>	Project Fellow Two (02)	MSc. (Physics) with first division	Experience in monitoring of greenhouse gases and other atmospheric pollutants/data handling	To assist in monitoring of atmosphere at Remote Monitoring Station in Western Himalayas area (Uttarakhand State) and should be willing to stay there	Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains (IGP) and Himalayan Regions (AIM-IGPHim)	Rs. 14,000/- + 30% HRA (upto 31.03.2017)	28 years
<b>5.0</b>	Research Associate One (01)	Ph.D. (Physics/Material Science/Nanoscience/Nanotechnology)	Experience in fabrication of nanoparticles/nanostructures, Nanoscale measurement etc.	Nanoscale measurements and nanostructures	Generic Development of Nanometrology for Nanotechnology at NPL, India	Rs.22,000/- + 30% HRA (upto 31/12/2014)	35 Years
<b>6.0</b>	Senior Research Fellow One (01)	MSc. (Physics/Math) with at least 55% + NET qualified Or M.Tech. (Environmental Science) with at least 55% marks and Physics/Math background	Knowledge of computer programming	Modeling/Analysis of atmospheric data to find oxidizing capacity of the atmosphere	Determination of the impact of oxidizing capacity of the troposphere on the abundance of CO and CH <sub>4</sub> with special reference to India	Rs. 18,000/- (consolidated) (upto 30/01/2015)	32 Years
<b>7.0</b>	Senior Project Fellow One (01)	M.Tech (Nanotechnology) with First Division	Experience in synthesis of nanoparticles	To synthesize nanoparticles of luminescent materials and make thin films	Efficient Si Photovoltaic with smart electronics and light systems under TAPSUN program	Rs. 18,000/- + 30% HRA (upto 31/03/2017)	32 years
<b>8.0</b>	Senior Research Fellow One (01)	MSc. (Physics) with at least 55% marks and one publication in SCI Journal and minimum 02 years post qualification research experience	Experience in low temperature physics	Research and development	Studies of Superconductivity in FeAs & FeSe bulk & thin films	Rs. 18,000/- + 30% HRA (upto 08/12/2014)	32 years
<b>9.1</b>	Research Associate One (01)	Ph.D. (Physics) involving Superconductivity & low temperature experimentation	Experience in studies of nanoparticles & thin films of magnetic and superconducting materials	Preparation, characterization and low temperature experimentation on nanoparticles & thin films of magnetic and superconducting materials	Study of magnetic anisotropy in magnetic nanoparticles, thin films and heterostructures	Rs. 22,000/- + 30% HRA (upto 17/10/2014)	35 years
<b>9.2</b>	Junior Research Fellow Two (02)	MSc. (Physics) with first division and NET (CSIR/UGC/Lecturership) qualified	Experimental Physics	Preparation, characterization and low temperature experimentation on nanoparticles & thin films of magnetic and superconducting materials	Study of magnetic anisotropy in magnetic nanoparticles, thin films and heterostructures	Rs. 16,000/- + 30% HRA (upto 17/10/2014)	28 years

<b>10.0</b>	Project Fellow Two (02)	MSc. (Physics) with first division and NET (CSIR/UGC/Lecturership) qualified	Experimental Physics	Experimental work in low temperature physics, synthesis of quantum structures and quantum measurements	Advanced Quantum Research and Innovation with ultra-small systems (AQuaRIUS)	Rs. 16,000/- + 30% HRA (upto 31.03.2017)	28 years
<b>11.0</b>	Senior Project Fellow One (01)	ME/M.Tech. (Material Science, photonics, nanotechnology) or equivalent degree in engineering/technology with at least 60% marks Or MSc. (Physics/Material Science/Optics or Applied Optics/Photonics) or MSc. Tech. (Photonics) with at least 55% marks or equivalent and at least one publication in SCI Journal and a minimum of two (02) year post qualification research experience in relevant field	Knowledge of Ultra-High Vacuum, thin film deposition	Growth and characterization of GaN epitaxial films	Growth and Characterization of III-Nitride heterostructures for solid state lighting under efficient silicon photovoltaic with smart electronics and lighting systems	Rs. 18,000/- + 30% HRA (upto 31/03/2017)	32 years
<b>12.0</b>	Project Fellow One (01)	MSc.(Physics) / B.Tech (Electronics) with first division and NET (CSIR/UGC/Lecturership) qualified	Modeling, data handling, project related work	To work with different metrological activities	Measurement Innovation in Science & Technology (MIST)	Rs. 16,000/- + 30% HRA (upto 31/03/2017)	28 years
<b>13.0</b>	Project Assistant One (01)	B.E/B.Tech. (Electronics & Instrumentation) with first division and research project experience on any vacuum system	-	Running Vacuum system, glass blowing, simulations & analysis on atomic clocks and handling glassware for Developing a rubidium atomic clock for space	Development of Rubidium Atomic Clock	Rs. 15,000/- + 30% HRA (upto 13.11.2013)	28 years
<b>14.0</b>	Research Associate One (01)	Ph.D. (Physics/Geophysics/Engineering)	-	Measurement and modeling of atmospheric aerosols and radiation, satellite data analysis	Seasonal variation of column aerosol properties, aerosol radiation forcing and the assessment of the impact of absorbing (BC) and desert dust aerosols in the mega-city of Delhi	Rs. 22,000/- + 30% HRA (upto 28/06/2014)	35 years

<b>15.0</b>	Senior Project Fellow One (01)	M.Tech (ECE/Applied Optics) with minimum 65% marks	Minimum 06 months experience in Instrumentation, vacuum systems, electronics	Work on atomic clocks / frequency standards	Single Trapped Ion Optical frequency Standards (STIOS)	Rs. 18,000 + 30% HRA (upto 31/03/2017)	32 years
<b>16.0</b>	Senior Project Fellow One (01)	M.Tech (Applied Optics/ ECE/Engg. Physics/Instrumentation) with a minimum of 60% marks	Knowledge of lasers, optics, vacuum and electronics	To work on assembly and testing of fountain subsystems	NOVel Optically-pumped Cesium Fountain (NOVOCEF)	Rs. 18,000 + 30% HRA (upto 31/03/2014)	32 years

## 31/07/2013 – Area: Chemistry

Post code	Name & No. of positions	Essential Educational Qualification	Desirable	Job description	Project /Scheme Title	Tenure of project & Emoluments/ stipend (Fixed )per month	Age as on 31/07/2013 (Upper age limit as per rule with relaxation as per rule for SC/ST/OBC/Women Candidates)
17.0	Project Assistant One (01)	MSc. (Chemistry) with First Division or M.Tech. (Chemical Engineering) with First Division	Preference for MSc Organic or Inorganic Chemistry	Synthesis of Organic and Inorganic compounds for device fabrication	Fellowship for INSPIRE faculty	Rs. 16,000/- + 30% HRA  (upto 20/11/2017)	28 years
18.0	Senior Project Fellow One (01)	MSc. (Chemistry – specialization in organic chemistry) with at least 60% marks and at least one publication in SCI Journal and minimum two (02) year post qualification research experience in relevant field	Experience in organic polymers and materials	Investigation of organic photovoltaic materials and devices	Novel Approaches for Solar Energy Conversion (CSIR-TAPSUN)	Rs. 18,000/- + 30% HRA  (upto 31.03.2017)	32 years
19.1	Project Fellow One (01)	M.E/M.Tech. (Biomedical engineering/Biochemistry/Nanotechnology/Biotechnology) with minimum 60% marks	Six month experience in nanoparticle synthesis and acquaintance with biological techniques used in toxicological studies	Synthesis of nanomaterials and their application in biology	Nanomaterials – Applications and Impact on Safety, Health and Environment (NanoSHE)	Rs. 12,000/- (consolidated)  (upto 31/03/2013)	26 years
19.2	Project Fellow One (01)	M.E/M.Tech. (Biomedical engineering/Nano-biotechnology/toxicology) with minimum 60% marks	Six month experience in nanoparticle synthesis and acquaintance with biological techniques used in toxicological studies	Synthesis of nanomaterials and their toxicological evaluation	Nanomaterials – Applications and Impact on Safety, Health and Environment (NanoSHE)	Rs. 12,000/- (consolidated)  (upto 31/03/2013)	26 years

<b>19.3</b>	Project Fellow One (01)	M.Sc. (Chemistry/Biology) with minimum 55% marks + NET qualified Or B.Tech. (Chemical) with NET qualified with minimum 55% marks Or M.Tech. (Nano) with minimum 60% marks	-	Synthesis and characterization of nanomaterials	Nanomaterials – Applications and Impact on Safety, Health and Environment (NanoSHE)	Rs. 12,000/- (consolidated)  (upto 31/03/2013)	26 years
<b>20.1</b>	Senior Research Fellow One (01)	M.Sc. (Biotechnology/Biochemistry/chemistry) with at least 55% marks and minimum one research publication in SCI Journal and two years post qualification research experience in relevant field.	Minimum two years post qualification experience in relevant field	Collection and analysis of cancer tissue samples	Infrared spectroscopy study for tumor diagnosis – Phase II	Rs. 18,000 + 30% HRA  (upto 07/07/2016)	32 years
<b>20.2</b>	Junior Research Fellow One (01)	M.Sc. (Biotechnology/Biochemistry/chemistry) with minimum 60% marks and NET qualified Or M.Tech (Biotechnology/Nanotechnology) with minimum 60% marks	-	Collection and analysis of cancer tissue samples	Infrared spectroscopy study for tumor diagnosis – Phase II	Rs. 16,000 + 30% HRA  (upto 07/07/2016)	28 years

## **General Conditions:-**

- 1.0** The total duration for which Project staff could be engaged will be five years. Where the duration of the Sponsored/Consultancy Project is less than 5 years, the services will be co-terminus with the duration of the project. There would be no automatic shifting of Project staff from one project to another. On completion of the tenure in one project, in case, one wants to apply for engagement in another project, he/she will have to go through the process of selection by submitting a fresh application under the new project. Appointment under the new project would be made only **after submission of 'No Demand Certificate' and 'No Dues certificate' in the previous project and submission of resignation from the previous project.** The maximum duration, for which Project staff could be engaged in different projects taken together, will be 5 years, i.e. the total period of five years of engagement of Project staff in different projects taken together should be counted only from 28.03.2003 onwards. The performance of the Project staff would be reviewed periodically so that any one not found up to the mark, could be replaced. As such, the offer of appointment will be given for short duration i.e. 6-months/1 year, which may be extended further based on the recommendations of the Selection Committee.
- 2.1** Leave: Project staff will be entitled for one day leave for each completed month's service.
- 2.2** Reservation: As regards reservation, if all things are equal, SC/ST/OBC candidates may be given preference over General candidates so as to ensure their representation.
- 2.3** Medical Facilities: Project Assistants will not be entitled for any medical facilities either through CSIR Dispensaries or under CS (MA) Rules, however, under emergent circumstances, Labs./Instt. may give emergency treatment/consultation through CSIR Dispensaries, but they will not be eligible for reimbursement of medical expenses.
- 2.4** Registration for Ph.D.: The facility for Ph.D. registration shall be allowed to those Project Staff who have worked for a minimum period of two years and have at least cleared CSIR-UGC Lecturership (NET) or GATE examination or published 02 papers in international peer reviewed journals.
- 2.5** There would be no component of increment etc. for Project staff and the consolidated remuneration to be paid to Project staff may be called "Stipend".
- 3.** Candidate should possess the required educational qualification as on date of interview.
- 4.** Candidate should consciously choose only one position in the area for which his/her candidature is suitable.
- 5.** **Mode of Selection:** In case large number of candidates turn up, the candidates will be shortlisted for interview by a duly constituted Screening Committee. Only the short-listed candidates will be interviewed by Selection Committee. The Select panel so prepared will be utilized for engagement as Project staff as and when requirement arise.
- 6.** Relaxation of age for SC/ST/PH/OBC and women will be applicable as per GOI instructions

### **For Post Code(s): 1.0 to 20.2**

Eligible candidates may appear together with downloaded application form duly filled-up, for "Floating (Walk-in) Interview" on the dates and areas as mentioned above on 30<sup>th</sup> & 31<sup>st</sup> July, 2013 between **09.00 AM to 10.00 AM** (candidate will not be entertained after 10.00 AM under any circumstance) in the Auditorium of the laboratory, with complete application (Bio-data) on plain paper giving the full details inclusive of marks starting from secondary examination onwards along with latest passport size photograph, original and attested copies of all certificates/testimonials. Candidates belonging to SC/ST/OBC/PH, should bring copies of certificates in the proper format issued by the appropriate authority as per the latest instructions issued on the subject.

No TA will be paid to the candidates for appearing in the interview.

### **Note:**

1. Candidate should go through the advertisement carefully for their suitability in the area.
- 2. Candidates who are selected against post code no(s). 2.0, 7.0, 11.0, 16.0 & 18.0 will be issued offer of appointment only after availability of funds under these projects.**

Controller of Administration